

DT [REDACTED] PCT/PTO 0 9 MAR 2005

MAIL STOP PCT  
PATENT  
8017-1156

# 2

IN THE U.S. PATENT AND TRADEMARK OFFICE

In re application of

Attn: OFFICE OF PCT  
LEGAL ADMINISTRATION  
Conf. 8975

Akira USUI et al.

Application No. 10/519,571 ✓

Group

Filed December 30, 2004

Examiner

GROUP III NITRIDE SEMICONDUCTOR SUBSTRATE  
AND PROCESS FOR PRODUCTION THEREOF

**REQUEST TO CORRECT INVENTORSHIP  
UNDER 37 CFR §1.48(a)**

Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

March 9, 2005

Sir:

Under the provisions of 37 CFR 1.48(a), it is respectfully requested that the inventorship of the above-identified non-provisional application be changed, to include not only the originally-named inventors, Masatomo SHIBATA and Yuichi OSHIMA, but also Akira USUI of Tokyo, Japan.

The undersigned registered patent attorney hereby states that the inventorship error occurred without deceptive intention on the part of the omitted inventor.

Attached hereto are: the assignees' Consent to Correction of Inventorship, another copy of the previously filed executed Declaration and Power of Attorney  
inventors, a Certificate Under 37 CFR §3.73(b), and a Statement

10/04/2005 13:00:11  
File Ref: 80000004 DA#: 250120 10519571  
01 FC:1464 130.00 DA 10519571

in Support of a Petition Under 37 CFR §1.48(a) from the omitted inventor.

Please charge the CFR 1.17(i) processing fee of \$130 to Deposit Account No. 25-0120.

Respectfully submitted,

YOUNG & THOMPSON

*Benoit Castel*

---

Benoit Castel, Reg. No. 35,041  
745 South 23<sup>rd</sup> Street  
Arlington, VA 22202  
Telephone (703) 521-2297  
Telefax (703) 685-0573  
(703) 979-4709

BC/at

10/27/2005 KMCLEAN1 00000003 250120 10519571  
01 FC:1617 130.00 DA

Pat'd PCT/PTO 09 MAR 2005

PATENT  
8017-1156

IN THE U.S. PATENT AND TRADEMARK OFFICE

In re application of

Akira USUI et al.

Conf. 8975

Application No. 10/519,571

Group

Filed December 30, 2004

Examiner

GROUP III NITRIDE SEMICONDUCTOR SUBSTRATE  
AND PROCESS FOR PRODUCTION THEREOF

CONSENT TO CORRECT INVENTORSHIP  
UNDER 37 CFR §1.48(a)

Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

We, NEC Corporation and Hitachi Cable, Ltd., both of Tokyo, Japan, assignees of the above-identified patent application, hereby consent to the change of inventorship recited herein from "Masatomo SHIBATA and Yuichi OSHIMA" to -Akira USUI, Masatomo SHIBATA and Yuichi OSHIMA--.

Respectfully submitted,

NEC Corporation

By

Sachio Matsubara

Sachio Matsubara, Senior Manager

Title Intellectual Asset Planning Division

Date March 3, 2005

Hitachi Cable, Ltd.

By

M. Kato

Masaaki Kato, General Manager

Title Intellectual Property Dept.

Date March 3, 2005

Patent PCT/PTO 09 MAR 2005

PATENT  
8017-1156

IN THE U.S. PATENT AND TRADEMARK OFFICE

In re application of

Akira USUI et al.

Conf. 8975

Application No. 10/519,571

Group

Filed December 30, 2004

Examiner

GROUP III NITRIDE SEMICONDUCTOR SUBSTRATE  
AND PROCESS FOR PRODUCTION THEREOF

STATEMENT IN SUPPORT OF A PETITION UNDER 37 CFR §1.48(a)

Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Akira USUI, hereby state that I was not named as a joint inventor in the above-identified application in error, and without any deceptive intention. Consequently, I should be added as an inventor in the above-captioned application.

Respectfully submitted,

March 3, 2005

Date

  
Akira USUI

IN THE U.S. PATENT AND TRADEMARK OFFICE

In re application of

Akira USUI et al.

Conf. 8975

Application No. 10/519,571

Group

Filed December 20, 2004

Examiner

GROUP III NITRIDE SEMICONDUCTOR SUBSTRATE  
AND PROCESS FOR PRODUCTION THEREOF

CERTIFICATE UNDER 37 CFR 3.73(b)

Assistant Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

NEC CORPORATION, a Japanese Corporation, and Hitachi  
Cable, Ltd., a Japanese Corporation, certify that they are:

☒ the assignees of the entire right, title and  
interest; or

☐ an assignee of less than the entire right,  
title and interest. The extent (by percentage) of its  
ownership interest is %

in the patent application/patent identified above by  
virtue of:

☒ an assignment from the inventor(s) of the  
patent application/patent identified above. The assignment was  
recorded in the Patent and Trademark Office at Reel ,  
Frame , or for which a copy thereof is attached.

The undersigned has reviewed all the evidentiary documents in the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

March 3, 2005

Date

Telephone Number

Sachio MATSUBARA

Typed or printed name

Sachio Matsubara

Signature of NEC Officer  
Sachio Matsubara, Senior Manager  
Intellectual Asset Planning Division

Title

March 3, 2005

Date

Telephone Number

Masaaki KATO

Typed or printed name

M. Kato

Signature of Hitachi Cable  
Officer

General Manager  
Intellectual Property Dept.

Title

# **ASSIGNMENT**

WHEREAS,

Akira USUI of Tokyo, Japan;  
Masatomo SHIBATA of Ibaraki, Japan; and  
Yuichi OSHIMA of Ibaraki, Japan  
 \_\_\_\_\_  
 \_\_\_\_\_

hereafter referred to as "applicant(s)", have invented certain new and useful improvements in  
Group III Nitride Semiconductor Substrate and Process for  
Production Thereof

- (a) for which an application for a United States patent was filed on  
 \_\_\_\_\_, Application No. \_\_\_\_\_
- (b) for which an application for a United States patent was executed on  
December 16, 2004


WHEREAS, NEC CORPORATION and HITACHI CABLE, LTD.  
 whose address is 7-1, Shiba 5-chome, Minato-ku, Tokyo 108-8001, Japan;  
and 6-1, Otemachi 1-chome, Chiyoda-ku, Tokyo 100-8166, Japan,  
respectively

hereinafter referred to as "assignee(s)", is desirous of acquiring the entire right, title and interest in and to the same,


NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00), the receipt whereof is acknowledged, and other good and valuable consideration, applicant(s), by these presents, do(es) hereby sell, assign and transfer unto said assignee(s) the full and exclusive right to the said invention in the United States and the entire right, title and interest in and to any and all patents which may be granted therefore in the United States, for its sole use and behoof, and for the use and behoof of its legal representatives, to the full end of the term for which said patents may be granted, as fully and entirely as the same would have been held by applicant(s) had this assignment and sale not been made.

Applicant(s) hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue said United States patents to said assignee(s).


Date December 16, 2004

Akira Usui   
 (signature) Akira USUI

Date December 16, 2004

Masatomo Shibata   
 (signature) Masatomo SHIBATA

Date December 16, 2004

Yuichi Oshima   
 (signature) Yuichi OSHIMA

Witness: Masato Kimura  
 Witness: Shinji Kimura

# COMBINED DECLARATION AND POWER OF ATTORNEY

Hand PCT/PTO 09 MAR 2005  
 orney Docket No. 10/519571

As a below named inventor, I hereby declare that

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: Group III Nitride Semiconductor Substrate and Process for Production Thereof

the specification of which: (check one)

## REGULAR OR DESIGN APPLICATION

- ☐ is attached hereto.
- ☐ was filed on \_\_\_\_\_ as application Serial No. \_\_\_\_\_  
 and was amended on \_\_\_\_\_ (if applicable).

## PCT FILED APPLICATION ENTERING NATIONAL STAGE

- ☒ was described and claimed in International application No. PCT/JP03/08360  
 filed on July 1, 2003 and as amended on November 27, 2003 (if any).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

## PRIORITY CLAIM

I hereby claim foreign priority benefits under 35 USC 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

## PRIOR FOREIGN APPLICATION(S)

Country	Application Number	Date of Filing (day, month, year)	Priority Claimed
Japan	2002-193733	02, July, 2002	Yes

I hereby claim the benefit under Title 35, United States Code §119(e) of any United States provisional patent application(s) listed below:

Application No.	Filing Date	Status (patented, pending abandoned)
(Complete this part only if this is a continuing application.)		

(Complete this part only if this is a continuing application.)

I hereby claim the benefit under 35 USC 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of 35 USC 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 Code of Federal Regulations §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Application No.	Filing Date	Status (patented, pending abandoned)
-----------------	-------------	--------------------------------------



## POWER OF ATTORNEY

Docket No. \_\_\_\_\_

The undersigned hereby authorizes the U.S. attorney or agent named herein to accept and follow instructions from \_\_\_\_\_ as to any action to be taken in the Patent and Trademark Office regarding this application without direct communication between the U.S. attorney or agent and the undersigned. In the event of a change in the persons from whom instructions may be taken, the U.S. attorney or agent named herein will be so notified by the undersigned.

As a named inventor, I hereby appoint the registered patent attorneys represented by Customer No. 000466 to prosecute this application and transact all business in the Patent and Trademark Office connected therewith, including: Robert J. PATCH, Reg. No. 17,355, Andrew J. PATCH, Reg. No. 32,925, Robert F. HARGEST, Reg. No. 25,590, Benoît CASTEL, Reg. No. 35,041, Thomas W. PERKINS, Reg. No. 33,027, Roland E. LONG, Jr., Reg. No. 41,949, Eric JENSEN, Reg. No. 37,855, Liam MCDOWELL, Reg. No. 44,231 and Phillip A. DUBOIS, Reg. No. 50,696,

c/o YOUNG & THOMPSON  
Second Floor  
745 South 23<sup>rd</sup> Street  
Arlington, Virginia 22202

Customer Number

00466

Address all telephone calls to Young & Thompson at 703/521-2297. Telefax: 703/685-0573.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

1-00 Full name of sole or first inventor: Akira USUI

Inventor's signature: Akira Usui (Seal) Date: December 16, 2004

Residence: Tokyo, Japan JPX Citizenship: Japanese

Post Office Address: c/o NEC Corporation, 7-1, Shiba 5-chome, Minato-ku,  
Tokyo 108-8001, Japan

2-00 Full name of second joint inventor, if any: Masatomo SHIBATA

Inventor's signature: Masatomo Shibata (Seal) Date: December 16, 2004

Residence: Ibaraki, Japan JPX Citizenship: Japanese

Post Office Address: c/o Hitachi Cable, Ltd., Advanced Research Center, 3550,  
Kidamari, Tsuchiura-shi, Ibaraki 300-0026, Japan

3-00 Full name of third joint inventor, if any: Yuichi OSHIMA

Inventor's signature: Yuichi Oshima (Seal) Date: December 16, 2004

Residence: Ibaraki, Japan JPX Citizenship: Japanese

Post Office Address: c/o Hitachi Cable, Ltd., Advanced Research Center, 3550,  
Kidamari, Tsuchiura-shi, Ibaraki 300-0026, Japan

Full name of fourth joint inventor, if any: \_\_\_\_\_

Inventor's signature: \_\_\_\_\_ Date: \_\_\_\_\_

Residence: \_\_\_\_\_ Citizenship: \_\_\_\_\_

Post Office Address: \_\_\_\_\_